EXHIBIT A

1 TITLE 20 ENVIRONMENTAL PROTECTION
2 CHAPTER 2 AIR QUALITY (STATEWIDE)
3 PART 50 OIL AND GAS SECTOR – OZONE PRECURSOR POLLUTANTS
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5 20.2.50.1 ISSUING AGENCY: Environmental Improvement Board.
6 [20.2.50.1 NMAC – N, XX/XX/2021]

20.2.50.2 SCOPE: This Part applies to sources located within areas of the state under the board's jurisdiction that, as of the effective date of this Part or anytime thereafter, are causing or contributing to have ambient ozone concentrations that exceed ninety-five percent of the national ambient air quality standard for ozone, as measured by a design value calculated and based on data from one or more department monitors. As of the effective date, sources located in the following counties of the state are subject to this Part: Chaves, Dona Ana, Eddy, Lea, Rio Arriba. Sandoval, San Juan, and Valencia.

[KINDER MORGAN COMMENT TO 20.2.50.2: As discussed in Kinder Morgan's Closing Argument (pp. 24-27), the statutory basis for this proposed 20.2.50 NMAC is unambiguous and must be limited to those areas of the state that *exceed* the NAAQS ozone standard by 95%. *See* N.M.S.A. § 74-2-5.C ("Rules adopted pursuant to this subsection shall be limited to sources of emissions within the area of the state where the ozone concentrations exceed ninety-five percent of the primary national ambient air quality standard."). Evidence in the record, including data from department monitors, does not support subjecting sources located in Chaves and Rio Arriba Counties to 20.2.50 NMAC at this time. Doing so would be outside of the Board's authority.]

[PROPOSED STATEMENT OF REASONS TO BE ADOPTED BY THE BOARD: The Board adopts 20.2.50 NMAC pursuant to Section 74-2-5.C of the New Mexico Air Quality Control Act (the "Act"), which states that rules adopted to provide for the attainment and maintenance of the primary national ambient air quality standard ("NAAQS") for ozone "shall be limited to sources of emissions within areas of the state where the ozone concentrations exceed ninety-five percent of the primary [NAAQS]." Evidence submitted on the record demonstrates that the following areas of the state exceed ninety-five percent of the ozone NAAQS and sources located in such counties are subject to 20.2.50 NMAC: Dona Ana, Eddy, Lea, Sandoval, San Juan, and Valencia Counties.]

- A. If, at any time after the effective date of this Part, sources in any other area(s) of the state not previously specified are determined to be causing or contributing to ambient ozone concentrations that exceed ninety-five percent of the national ambient air quality standard for ozone, as measured by a design value calculated by the U.S. Environmental Protection Agency based on data from one or more department monitors, the department shall petition the Board to amend this Part to incorporate such areas.
- (1) The notice of proposed rulemaking shall be published no less than one-hundred and eighty (180) days before sources in the affected areas will become subject to this Part, and shall include, in addition to the requirements of the Board's rulemaking procedures at 20.1.1.301 NMAC:
- (a) a list of the areas that the department proposed to incorporate into this Part, and the date upon which the sources in those areas will become subject to this Part; and
- **(b)** proposed implementation dates, consistent with the time provided in the phased implementation schedules provided for throughout this Part, for sources within the areas subject to the proposed rulemaking to come into compliance with the provisions of this Part.
- (2) In any rulemaking pursuant to this Section, the Board shall be limited to consideration of only those proposed changes necessary to incorporate other areas of the state into this Part.

[KINDER MORGAN COMMENT TO 20.2.50.2.A.: As stated in its Non-Technical Statement, Kinder Morgan supports the Department's addition of the clear process at 20.2.50.2.A. NMAC by which new areas of New Mexico may become subject to the 20.2.50 NMAC following the effective date.]

[PROPOSED STATEMENT OF REASONS TO BE ADOPTED BY THE BOARD: The Board has determined that it is important to outline a clear and transparent process in the event additional areas of the state exceed ninety-five percent of the ozone NAAQS after the effective date, thereby requiring additional sources to become subject to the rule. This approach is consistent with the Act and the Board's rules, which require notice and a public hearing

1 rulemaking for any rule amendment.]

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Once a source becomes subject to this Part based upon its potential to emit, all requirements of this Part that apply to the source are irrevocably effective unless the source obtains a federally enforceable limit on the potential to emit that is below the applicability thresholds established in this Part, or the relevant section contains a threshold below which the requirements no longer apply.

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7 [20.2.50.2 NMAC - N, XX/XX/2021]

9 STATUTORY AUTHORITY: Environmental Improvement Act, Section 74-1-1 to 74-1-16 10 NMSA 1978, including specifically Paragraph (4) and (7) of Subsection A of Section 74-1-8 NMSA 1978, and Air Quality Control Act, Sections 74-2-1 to 74-2-22 NMSA 1978, including specifically Subsections A, B, C, D, F, and 11 G of Section 74-2-5 NMSA 1978 (as amended through 2021). 12 13 [20.2.50.3 NMAC - N, XX/XX/2021]

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DURATION: Permanent. 20.2.50.4 [20.2.50.4 NMAC - N, XX/XX/2021]

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EFFECTIVE DATE: Month XX, 2022, except where a later date is specified in another Section. [20.2.50.5 NMAC - N, XX/XX/2021]

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OBJECTIVE: The objective of this Part is to establish emission standards for volatile organic 20.2.50.6 compounds (VOC) and oxides of nitrogen (NO_x) for oil and gas production, processing, compression, and transmission sources.

[20.2.50.6 NMAC - N, XX/XX/2021]

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[KINDER MORGAN COMMENT TO 20.2.50.6: It is undisputed that this rulemaking is focused on achieving emissions reductions from oil and gas sources that emit VOC and NO_x. It is also undisputed that methane is not an ozone precursor. While Kinder Morgan does not contest that reducing VOC and NO_x emissions may result in the co-benefit of reducing methane emissions, no portion of 20.2.50 NMAC (nor the implementation thereof) can be predicated on reducing methane emissions – including cost-benefit analyses. Based on our review of the hearing transcript and our participation in the hearing, we do not believe this issue is in dispute; however, we think it is important that the Board reiterate this position in its Statement of Reasons to add clarity and certainty during implementation for any interested stakeholder that is not party to this rulemaking.]

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37 38 [PROPOSED STATEMENT OF REASONS TO BE ADOPTED BY THE BOARD: In adopting these rules, it is the Board's objective to adopt standards to control emissions of oxides of nitrogen ("NO_x") and volatile organic compounds ("VOCs"). The Board recognizes that a co-benefit of these standards will be a reduction in methane emissions; however, the Board's rules are limited to regulating emissions of VOC and NO_x from the subject sources. This approach is consistent with the Board's statutory authority under N.M.S.A. § 74-2-5.C.]

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DEFINITIONS: In addition to the terms defined in 20.2.2 NMAC - Definitions, as used in this 20.2.50.7 Part, the following definitions apply.

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"Auto-igniter" means a device that automatically attempts to relight the pilot flame of a control A. device in order to combust VOC emissions, or a device that will automatically attempt to combust the VOC emission stream.

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"Bleed rate" means the rate in standard cubic feet per hour at which gas is continuously vented В. from a pneumatic controller.

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C. "Calendar year" means a year beginning January 1 and ending December 31.

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"Centrifugal compressor" means a machine used for raising the pressure of natural gas by drawing in low-pressure natural gas and discharging significantly higher-pressure natural gas by means of a mechanical rotating vane or impeller. A screw, sliding vane, and liquid ring compressor is not a centrifugal compressor.

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"Closed vent system" means a system that is designed, operated, and maintained to route the VOC emissions from a source or process to a process stream or control device with no loss of VOC emissions to the atmosphere during operation.

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"Commencement of operation" means for an oil and natural gas well site, the date any

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1 operation.

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permanent production equipment is in use and product is consistently flowing to a sales line, gathering line or storage vessel from the first producing well at the stationary source, but no later than the end of well completion "Component" means a pump seal, flange, pressure relief device (including thief hatch or other G.

- opening on a storage vessel), connector or valve that contains or contacts a process stream with hydrocarbons. except for components where process streams consist solely of glycol, amine, produced water, or methanol.
- "Connector" means flanged, screwed, or other joined fittings used to connect pipeline segments, tubing, pipe components (such as elbows, reducers, "T's" or valves) to each other; or a pipeline to a piece of equipment; or an instrument to a pipe, tube, or piece of equipment. A common connector is a flange. Joined fittings welded completely around the circumference of the interface are not considered connectors for the purpose of this Part.
- "Construction" means fabrication, erection, or installation of a stationary source, including but not limited to temporary installations and portable stationary sources, but does not include relocations or like-kind replacements of existing equipment.
- "Control device" means air pollution control equipment or emission reduction technologies that J. thermally combust, chemically convert, or otherwise destroy or recover air contaminants. Examples of control devices may include but are not limited to open flares, enclosed combustion devices (ECDs), thermal oxidizers (TOs), vapor recovery units (VRUs), fuel cells, condensers, catalytic converters (oxidative, selective, and nonselective), or other emission reduction equipment. A control device may also include any other air pollution control equipment or emission reduction technologies approved by the department to comply with emission standards in this Part. A VRU or other equipment used primarily as process equipment is not considered a control device.
 - "Department" means the New Mexico environment department. K.
- L. "Design value" means the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration.
 - "Downtime" means the period of time when equipment is not in operation. M.
- "Enclosed combustion device" means a combustion device where waste gas is combusted in an N. enclosed chamber solely for the purpose of destruction. This may include, but is not limited to, an enclosed flare or combustor.
 - "Existing" means constructed or reconstructed before the effective date of this Part. О.
- P. "Gathering and boosting station" means a facility, including all equipment and compressors, located downstream of a well site that collects or moves natural gas prior to the inlet of a natural gas processing plant; or prior to a natural gas transmission pipeline or transmission compressor station if no gas processing is performed; or collects, moves, or stabilizes crude oil or condensate prior to an oil transmission pipeline or other form of transportation. Gathering and boosting stations may include equipment for liquids separation, natural gas dehydration, and tanks for the storage of water and hydrocarbon liquids.
- "Glycol dehydrator" means a device in which a liquid glycol absorbent, including ethylene glycol, diethylene glycol, or triethylene glycol, directly contacts a natural gas stream and absorbs water.
- "High-bleed pneumatic controller" means a continuous bleed pneumatic controller that is designed to have a continuous bleed rate that emits in excess of 6 standard cubic feet per hour (scfh) of natural gas to the atmosphere.
- "Hydrocarbon liquid" means any naturally occurring, unrefined petroleum liquid and can S. include oil, condensate, and intermediate hydrocarbons. Hydrocarbon liquid does not include produced water.
- "Inactive well site" means a well site where the well is not being used for beneficial purposes, T. such as production or monitoring, and is not being drilled, completed, repaired or worked over.
- U. "Injection well site" means a well site where the well is used for the injection of air, gas, water or other fluids into an underground stratum.
- "Intermittent pneumatic controller" means a pneumatic controller that is not designed to have a continuous bleed rate but is designed to only release natural gas above de minimis amounts to the atmosphere as part of the actuation cycle.
- "Liquid unloading" means the removal of accumulated liquid from the wellbore that reduces or W. stops natural gas production.
- X. "Liquid transfer" means the unloading of a hydrocarbon liquid from a storage vessel to a tanker truck or tanker rail car for transport.
- "Local distribution company custody transfer station" means a metering station where the local distribution (LDC) company receives a natural gas supply from an upstream supplier, which may be an interstate transmission pipeline or a local natural gas producer, for delivery to customers through the LDC's

intrastate transmission or distribution lines.

- **Z.** "Low-bleed pneumatic controller" means a continuous bleed pneumatic controller that is designed to have a continuous bleed rate that emits less than or equal to 6 scfh of natural gas to the atmosphere.
- **AA.** "Natural gas-fired heater" means an enclosed device using a controlled flame and with a primary purpose to transfer heat directly to a process material or to a heat transfer material for use in a process.
- **BB.** "Natural gas processing plant" means the processing equipment engaged in the extraction of natural gas liquid from natural gas or fractionation of mixed natural gas liquid to a natural gas product, or both. A Joule-Thompson valve, a dew point depression valve, or an isolated or standalone Joule-Thompson skid is not a natural gas processing plant.
 - **CC.** "New" means constructed or reconstructed on or after the effective date of this Part.
- **DD.** "Non-emitting controller" means a device that monitors a process parameter such as liquid level, pressure, or temperature and sends a signal to a control valve in order to control the process parameter and does not emit natural gas to the atmosphere. Examples of non-emitting controllers include but are not limited to instrument air or inert gas pneumatic controllers, electric controllers, mechanical controllers and Routed Pneumatic Controllers.
 - **EE.** "Occupied area" means the following:
- a building or structure used as a place of residence by a person, family, or families, and includes manufactured, mobile, and modular homes, except to the extent that such manufactured, mobile, or modular home is intended for temporary occupancy or for business purposes;
- (2) indoor or outdoor spaces associated with a school that students use commonly as part of their curriculum or extracurricular activities;
- (3) five-thousand (5,000) or more square feet of building floor area in commercial facilities that are operating and normally occupied during working hours: and
- (4) an outdoor venue or recreation area, such as a playground, permanent sports field, amphitheater, or similar place of outdoor public assembly.
- **FF.** "Operator" means the person or persons responsible for the overall operation of a stationary source.
- **GG.** "Optical gas imaging (OGI)" means an imaging technology that utilizes a high-sensitivity infrared camera designed for and capable of detecting hydrocarbons.
 - **HH.** "Owner" means the person or persons who own a stationary source or part of a stationary source.
- **II.** "Permanent pit or pond" means a pit or pond used for collection, retention, or storage of produced water or brine and is installed for longer than one year.
- **JJ.** "Pneumatic controller" means a device that monitors a process parameter such as liquid level, pressure, or temperature and uses pressurized gas (which may be released to the atmosphere during normal operation) and sends a signal to a control valve in order to control the process parameter. Controllers that do not utilize pressurized gas are not pneumatic controllers.
- **KK.** "Pneumatic diaphragm pump" means a positive displacement pump powered by pressurized gas that uses the reciprocating action of flexible diaphragms in conjunction with check valves to pump a fluid. A pump in which a fluid is displaced by a piston driven by a diaphragm is not considered a diaphragm pump. A lean glycol circulation pump that relies on energy exchange with the rich glycol from the contactor is not considered a diaphragm pump.
- LL. "Potential to emit (PTE)" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on the hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is federally enforceable. The PTE for nitrogen dioxide shall be based on total oxides of nitrogen.
- **MM.** "Produced water" means a liquid that is an incidental byproduct from well completion and the production of oil and gas.
- **NN.** "Produced water management unit" means a recycling facility or a permanent pit or pond that is a natural topographical depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to accumulate produced water and has a design storage capacity equal to or greater than 50,000 barrels.
- **OO.** "Qualified Professional Engineer" means an individual who is licensed by a state as a professional engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge, and experience to make the specific technical certifications required under this Part.
- **PP.** "Reciprocating compressor" means a piece of equipment that increases the pressure of process gas by positive displacement, employing linear movement of a piston rod.

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- **QQ.** "Reconstruction" means a modification that results in the replacement of the components or addition of integrally related equipment to an existing source, to such an extent that the fixed capital cost of the new components or equipment exceeds fifty percent of the fixed capital cost that would be required to construct a comparable entirely new facility.
- **RR.** "Recycling facility" means a stationary or portable facility used exclusively for the treatment, reuse, or recycling of produced water and does not include oilfield equipment such as separators, heater treaters, and scrubbers in which produced water may be used.
 - **SS.** "Responsible official" means one of the following:
- (1) for a corporation: president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative.
 - (2) for a partnership or sole proprietorship: a general partner or the proprietor, respectively.
- TT. "Routed pneumatic controller" means a pneumatic controller of any type that releases natural gas to a process, sales line, or to a combustion device instead of directly to the atmosphere.
- **UU.** "Small business facility" means, for the purposes of this Part, a source that is independently owned or operated by a company that is a not a subsidiary or a division of another business, that employs no more than 10 employees at any time during the calendar year, and that has a gross annual revenue of less than \$250,000. Employees include part-time, temporary, or limited service workers.
- **VV.** "Stabilized" means, when used to refer to stored condensate, that the condensate has reached substantial equilibrium with the atmosphere and that any emissions that occur are those commonly referred to within the industry as "working and breathing losses."
- **WW.** "Standalone tank battery" means a tank battery that is not designated as associated with a well site, gathering and boosting station, natural gas processing plant, or transmission compressor station.
- **XX.** "Startup" means the setting into operation of air pollution control equipment or process equipment.
- YY. "Stationary Source" or "source" means any building, structure, equipment, facility, installation (including temporary installations), operation, process, or portable stationary source that emits or may emit any air contaminant. Portable stationary source means a source that can be relocated to another operating site with limited dismantling and reassembly.
- **ZZ.** "Storage vessel" means a single tank or other vessel that is designed to contain an accumulation of hydrocarbon liquid or produced water and is constructed primarily of non-earthen material including wood, concrete, steel, fiberglass, or plastic, which provide structural support. A well completion vessel that receives recovered liquid from a well after commencement of operation for a period that exceeds 60 days is considered a storage vessel. A storage vessel does not include a vessel that is skid-mounted or permanently attached to a mobile source and located at the site for less than 180 consecutive days, such as a truck or railcar; a process vessel such as a surge control vessel, bottom receiver, or knockout vessel; a pressure vessel designed to operate in excess of 204.9 kilopascals (29.72 psi) without emissions to the atmosphere; or a floating roof tank complying with 40 CFR Part 60, Subpart Kb.
- AAA. "Tank battery" means a storage vessel or group of storage vessels that receive or store crude oil, condensate, or produced water from a well or wells for storage. The owner or operator shall designate whether a tank battery is a standalone tank battery or is associated with a well site, gathering and boosting station, natural gas processing plant, or transmission compressor station. The owner or operator shall maintain records of this designation and make them available to the department upon request. A tank battery associated with a well site, gathering or boosting station, natural gas processing plant, or transmission compressor station is subject to the requirements in this Part for those facilities, as applicable. Tank battery does not include storage vessels at saltwater disposal facilities or produced water management units.
- **BBB.** "Temporarily abandoned well site" means an inactive well site where the well's completion interval has been isolated. The completion interval is the reservoir interval that is open to the borehole and is isolated when tubing and artificial equipment has been removed and a bottom plug has been set.
- **CCC.** "Transmission compressor station" means a facility, including all equipment and compressors, that moves pipeline quality natural gas at increased pressure from a well site or natural gas processing plant through a transmission pipeline for ultimate delivery to the local distribution company custody transfer station, underground storage, or to other industrial end users. Transmission compressor stations may include equipment for liquids separation, natural gas dehydration, and tanks for the storage of water and hydrocarbon liquids.

1 definition of "gathering and boosting station," deleted definition of "natural gas compressor station," and added (and 2 subsequently revised) definition of "transmission compressor station." As Kinder Morgan testified at length, 3 operations in the transmission segment differ significantly from other segments of industry. This separate definition is necessary to apply each rule section, as appropriate, to the unique transmission segment operations.] 4 5 6 [PROPOSED STATEMENT OF REASONS TO BE ADOPTED BY THE BOARD: The Board recognizes that 7 the transmission segment of the oil and gas industry involves different operations from other segments of the oil and 8 gas industry, and comprises the transportation and compression of pipeline quality gas. The Board has determined 9 that it is necessary and appropriate to include a definition of compressor station specific to the transmission segment 10 in order to accurately apply each rule section to the appropriate source and type of operation.] 11 DDD. "Vessel measurement system" means equipment and methods used to determine the quantity of 12 13 the liquids inside a vessel (including a flowback vessel) without requiring direct access through the vessel thief 14 hatch or other opening. 15 EEE. "Well workover" means the repair or stimulation of an existing production well for the purpose 16 of restoring, prolonging, or enhancing the production of hydrocarbons. 17 "Well site" means the equipment under the operator's control directly associated with one or more 18 oil wells or natural gas wells upstream of the natural gas processing plant or gathering and boosting station, if any. A 19 well site may include equipment used for extraction, collection, routing, storage, separation, treating, dehydration, 20 artificial lift, combustion, compression, pumping, metering, monitoring, and product piping. A well site does not 21 include an injection well site. 22 [20.2.50.7 NMAC - N, XX/XX/2021] 23 24 **SEVERABILITY:** If any provision of this Part, or the application of this provision to any person 20.2.50.8 25 or circumstance is held invalid, the remainder of this Part, or the application of this provision to any person or 26 circumstance other than those as to which it is held invalid, shall not be affected thereby. 27 [20.2.50.8 NMAC - N, XX/XX/2021] 28 29 **CONSTRUCTION:** This Part shall be liberally construed to carry out its purpose. 30 [20.2.50.9 NMAC - N, XX/XX/2021] 31 20.2.50.10 32 SAVINGS CLAUSE: Repeal or supersession of prior versions of this Part shall not affect 33 administrative or judicial action initiated under those prior versions. 34 [20.2.50.10 NMAC - N, XX/XX/2021] 35 36 **COMPLIANCE WITH OTHER REGULATIONS:** Compliance with this Part does not relieve 37 a person from the responsibility to comply with other applicable federal, state, or local laws, rules or regulations, 38 including more stringent controls. 39 [20.2.50.11 NMAC - N, XX/XX/2021] 40 41 **DOCUMENTS:** Documents incorporated and cited in this Part may be viewed at the New 20.2.50.12 42 Mexico environment department, air quality bureau. 43 [20.2.50.12 NMAC - N, XX/XX/2021] 44 [The Air Quality Bureau is located at 525 Camino de los Marquez, Suite 1, Santa Fe, New Mexico 87505.] 45 46 20.2.23.13-20.2.23.110 [RESERVED] 47 48 20.2.50.111 APPLICABILITY: 49 50 [REDACTED] 51 52 53

55 **20.2.50.112 GENERAL PROVISIONS:**

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A. General requirements:

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five years.

- (1) Sources subject to emissions standards and requirements under this Part shall be operated and maintained consistent with manufacturer specifications, or good engineering and maintenance practices. When used in this Part, the term manufacturer specifications means either the original equipment manufacturer (or successor) emissions-related design specifications, maintenance practices and schedules, or an alternative set of specifications, maintenance practices and schedules sufficient to operate and maintain such sources in good working order, which have been approved by qualified maintenance personnel based on engineering principles and field experience. The owner or operator shall keep manufacturer specifications on file when available, as well as any alternative specifications that are being followed, and make them available upon request by the department. The terms of 20.2.50.112.A(1) apply any time reference to manufacturer specifications occurs in this Part.
- Sources, including associated air pollution control equipment and monitoring equipment, subject to emission standards or requirements under this Part shall at all times, including periods of startup, shutdown, and malfunction, be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions of VOC and NOx. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent consistent with safety and good air pollution control practices. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions beyond levels required by the applicable standard under this Part. The terms of 20.2.50.112.A(2) apply any time reference to minimizing emissions occurs in this Part.
- (3) Within two years of the effective date of this Part, owners and operators of a source requiring equipment monitoring, testing, or inspection shall develop and implement a data system(s) capable of storing information for each source in a manner consistent with this section. The owner or operator shall maintain information regarding each source requiring equipment monitoring, testing, or inspection in a data system(s), including the following information in addition to the required information specified in an applicable section of this Part:
 - (a) unique identification number;
 - **(b)** location (latitude and longitude) of the source;
 - (c) type of source (e.g., tank, VRU, dehydrator, pneumatic controller, etc.);
 - (d) for each source, the controlled VOC (and NO_x, if applicable) emissions in

lbs./hr. and tpy;

- (e) make, model, and serial number; and
- (f) a link to the manufacturer maintenance schedule or repair recommendations, or company-specific operational and maintenance practices.
 - (4) The data system(s) shall be maintained by the owner or operator of the facility.
- (5) The owner or operator shall manage the source's record of data in the data system(s). The owner or operator shall generate a Compliance Database Report (CDR) from the information in the data system. The CDR is an electronic report maintained by the owner or operator and that can be submitted to the department upon request.
- (6) The CDR is a report distinct from the owner or operator's data system(s). The department does not require access to the owner or operator's data system(s), only the CDR.
- (7) The owner or operator's authorized representative must be able to access and input data in the data system(s) record for that source. That access is not required to be at any time from any location.
- (8) The owner or operator shall contemporaneously track each monitoring event, and shall comply with the following:
- (a) data gathered during each monitoring or testing event shall be uploaded into the data system as soon as practicable, but no later than three business days of each compliance event, and when the final reports are received;
- (b) certain sections of this Part require a date and time stamp, including a GPS display of the location, for certain monitoring events. No later than one year from the effective date of this Part, the department shall finalize a list of approved technologies to comply with date and time stamp requirements, and shall post the approved list on its website. Owners and operators shall comply with this requirement using an approved technology no later than two years from the effective date of this Part. Prior to such time, owners and operators may comply with this requirement by making a written or electronic record of the date and time of any affected monitoring event; and
 - (c) data required by this Part shall be maintained in the data system(s) for at least
 - (9) The department for good cause may request that an owner or operator retain a third party

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at their own expense to verify any data or information collected, reported, or recorded pursuant to this Part, and make recommendations to correct or improve the collection of data or information. Such requests may be made no more than once per year. The owner or operator shall submit a report of the verification and any recommendations made by the third party to the department by a date specified and implement the recommendations in the manner approved by the department. The owner or operator may request a hearing on whether good cause was demonstrated or whether the recommendations approved by the department must be implemented.

- Where Part 50 refers to applicable federal standards or requirements, the references are to the applicable federal standards or requirements that were in effect at the time of the effective date of this Part, unless the applicable federal standards or requirements have been superseded by more stringent federal standards or requirements.
- Prior to modifying an existing source, including but not limited to increasing a source's throughput or emissions, the owner or operator shall determine the applicability of this Part in accordance with 20.2.50.111.B NMAC.
- Monitoring requirements: In addition to any monitoring requirements specified in the applicable sections of this Part, owners and operators shall comply with the following:
- Unless otherwise specified, the term monitoring as used in this Part includes, but is not limited to, monitoring, testing, or inspection requirements.
- If equipment is shut down at the time of periodic testing, monitoring, or inspection required under this Part, the owner or operator shall not be required to restart the unit for the sole purpose of performing the testing, monitoring, or inspection, but shall note the shut down in the records kept for that equipment for that monitoring event.

[KINDER MORGAN COMMENT TO 20.2.50.112.B.: During the hearing, the Department determined to strike an earlier version of 20.2.50.112.B.(2) NMAC requiring monthly monitoring. See Closing Argument, at 22-23. The Department reasoned that, because (1) each section of the Proposed Rules contains specific monitoring requirements for that particular equipment or process, and (2) the general monitoring requirement set forth in Section 112 was not intended to be something unique from the other monitoring required in the Proposed Rules, the Department determined it was appropriate to remove the general provision and rely on the monitoring schedules required in each section. The Department reflects these positions in this January 18 Draft. This deletion adds clarity that is necessary for implementation, and Kinder Morgan asks the Board to adopt this provision as drafted.]

- C. Recordkeeping requirements: In addition to any recordkeeping requirements specified in the applicable sections of this Part, owners and operators shall comply with the following:
- Within three business days of a monitoring event and when final reports are received, an electronic record shall be made of the monitoring event and shall include the information required by the applicable sections of this Part.
 - The owner or operator shall keep an electronic record required by this Part for five years.
- By July 1 of each calendar year starting in 2024, the owner or operator shall generate a Compliance Database Report (CDR) on all assets under its control that are subject to the CDR requirements of this Part at the time the CDR is prepared and keep this report on file for five years.
- **Reporting requirements:** In addition to any reporting requirements specified in the applicable sections in this Part, the owner or operator shall respond within three business days to a request for information by the department under this Part. The response shall provide the requested information for each source subject to the request by electronically submitting a CDR to the department's Secure Extranet Portal (SEP), or by other means and formats specified by the department in its request. If the department requests a CDR from multiple facilities, additional time will be given as appropriate. [20.2.50.112 NMAC - N, XX/XX/2021]

20.2.50.113 **ENGINES AND TURBINES:**

- Applicability: Portable and stationary natural gas-fired spark ignition engines, compression ignition engines, and natural gas-fired combustion turbines located at well sites, tank batteries, gathering and boosting stations, natural gas processing plants, and transmission compressor stations, with a rated horsepower greater than the horsepower ratings of table 1, 2, and 3 of 20.2.50.113 NMAC are subject to the requirements of 20.2.50.113 NMAC. Non-road engines as defined in 40 C.F.R. §§ 1068.30 are not subject to 20.2.50.113 NMAC.
 - B. **Emission standards:**

 (1) The owner or operator of a portable or stationary natural gas-fired spark ignition engine, compression ignition engine, or natural gas-fired combustion turbine shall ensure compliance with the emission standards by the dates specified in Subsection B of 20.2.50.113 NMAC, except as otherwise specified under an Alternative Compliance Plan approved pursuant to Paragraph (10) of Subsection B of 20.2.50.113 NMAC or alternative emissions standards approved pursuant to Paragraph (11) of Subsection B of 20.2.50.113 NMAC.

(2) The owner or operator of an existing natural gas-fired spark ignition engine shall complete an inventory of all existing engines subject to this Part by January 1, 2023, and shall prepare a schedule to ensure that each existing engine does not exceed the emission standards in table 1 of Paragraph (2) of Subsection B of 20.2.50.113 NMAC as follows, except as otherwise specified under an Alternative Compliance Plan (ACP) approved pursuant to Paragraph (10) of Subsection B of 20.2.50.113 NMAC or alternative emissions standards approved pursuant to Paragraph (11) of Subsection B of 20.2.50.113 NMAC:

(a) by January 1, 2025, the owner or operator shall ensure at least thirty percent of the company's existing engines meet the emission standards.

(b) by January 1, 2027, the owner or operator shall ensure at least an additional thirty-five percent of the company's existing engines meet the emission standards.

(c) by January 1, 2029, the owner or operator shall ensure that the remaining thirty-five percent of the company's existing engines meet the emission standards.

(d) in lieu of meeting the emission standards for an existing natural gas-fired spark ignition engine, an owner or operator may reduce the annual hours of operation of an engine such that the annual PTE of NOx and VOC emissions are reduced to achieve an equivalent allowable ton per year emission reduction as set forth in table 1 of Paragraph (2) of Subsection B of 20.2.50.113 NMAC, or by at least ninety-five percent per year.

Table 1 - EMISSION STANDARDS FOR EXISTING NATURAL GAS-FIRED SPARK IGNITION ENGINES

Engine Type	Rated bhp	NO _x	CO	NMNEHC (as propane)
2 Stroke Lean Burn	>1,000	3.0 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr
4-Stroke Lean Burn	>1,000 bhp and <1,775 bhp	2.0 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr
4-Stroke Lean	≥1,775 bhp	0.5 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr
Burn				
Rich Burn	>1,000 bhp	0.5 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr

(3) The owner or operator of a new natural gas-fired spark ignition engine shall ensure the engine does not exceed the emission standards in table 2 of Paragraph (3) of Subsection B of 20.2.50.113 NMAC upon startup.

Table 2 - EMISSION STANDARDS FOR NEW NATURAL GAS-FIRED SPARK IGNITION ENGINES

Engine Type	Rated bhp	NO_x	CO	NMNEHC (as propane)
Lean-burn	> 500 and < 1875	0.50 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr
Lean-burn	≥ 1875	0.30 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr
Rich-burn	>500	0.50 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr

- (4) The owner or operator of a natural gas-fired spark ignition engine with NO_x emission control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less, corrected to fifteen percent oxygen.
- (5) The owner or operator of a compression ignition engine shall ensure compliance with the following emission standards:
- (a) a new portable or stationary compression ignition engine with a maximum design power output equal to or greater than 500 horsepower that is not subject to the emission standards under Subparagraph (b) of Paragraph (5) of Subsection B of 20.2.50.113 NMAC shall limit NO_x emissions to not more than nine g/bhp-hr upon startup.
- **(b)** a stationary compression ignition engine that is subject to and complying with Subpart IIII of 40 CFR Part 60, Standards of Performance for Stationary Compression Ignition Internal Combustion

Engines, is not subject to the requirements of Subparagraph (a) of Paragraph (5) of Subsection B of 20.2.50.113 NMAC.

4 5 6 (6) The owner or operator of a portable or stationary compression ignition engine with NO_x emission control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less, corrected to fifteen percent oxygen.

(7) The owner or operator of a stationary natural gas-fired combustion turbine with a

maximum design rating equal to or greater than 1,000 bhp shall comply with the applicable emission standards for

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an existing, new, or reconstructed turbine listed in table 3 of Paragraph (7) of Subsection B of 20.2.50.113 NMAC.

(a) The owner or operator of an existing stationary natural gas-fired combustion turbine shall complete an inventory of all existing turbines subject to Part 50 by July 1, 2023, and shall prepare a schedule to ensure that each subject existing turbine does not exceed the emission standards in table 3 of Paragraph (7) of Subsection B of 20.2.50.113 NMAC as follows, except as otherwise specified under an Alternative Compliance Plan approved pursuant to Paragraph (10) of Subsection B of 20.2.50.113 NMAC or alternative

emissions standards approved pursuant to Paragraph (11) of Subsection B of 20.2.50.113 NMAC:

(i) by January 1, 2024, the owner or operator shall ensure at least thirty percent of the company's existing turbines meet the emission standards.

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(ii) by January 1, 2026, the owner or operator shall ensure at least an additional thirty-five percent of the company's existing turbines meet the emission standards.

19 20 (iii) by January 1, 2028, the owner or operator shall ensure that the remaining thirty-five percent of the company's existing turbines meet the emission standards.

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(iv) in lieu of meeting the emission standards for an existing stationary natural gas-fired combustion turbine, an owner or operator may reduce the annual hours of operation of a turbine such that the annual PTE of NOx and VOC emissions are reduced to achieve an equivalent allowable ton per year emission reduction as set forth in table 3 of Paragraph (7) of Subsection B of 20.2.50.113 NMAC, or by at least ninety-five percent per year.

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Table 3 - EMISSION STANDARDS FOR STATIONARY COMBUSTION TURBINES

For each applicable existing natural gas-fired combustion turbine, the owner or operator shall ensure the turbine does not exceed the following emission standards no later than the schedule set forth in Paragraph (7)(a) of Subsection B of 20.2.50.113 NMAC:

Turbine Rating (bhp)	NO _x (ppmvd @15% O ₂)	CO (ppmvd @ 15% O ₂)	NMNEHC (as propane, ppmvd @15% O ₂)
≥1,000 and <4,100	150	50	9
≥4,100 and <15,000	50	50	9
≥15,000	50	50 or 93% reduction	5 or 50% reduction

For each applicable new natural gas-fired combustion turbine, the owner or operator shall ensure the turbine does not exceed the following emission standards upon startup:

Turbine Rating (bhp)	NO _x (ppmvd @15% O ₂)	CO (ppmvd @ 15% O ₂)	NMNEHC (as propane, ppmvd @15% O ₂)
\geq 1,000 and <4,000	100	25	9
≥4,000 and <15,900	15	10	9
≥15,900	9.0 Uncontrolled or 2.0 with Control	10 Uncontrolled or 1.8 with Control	5

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(8) The owner or operator of a stationary natural gas-fired combustion turbine with NO_x emission control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less, corrected to fifteen percent oxygen.

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(9) The owner or operator of an emergency use engine as defined by 40 C.F.R. §§ 60.4211, 60.4243, or 63.6675 is not subject to the emissions standards in this Part but shall be equipped with a non-resettable hour meter to monitor and record any hours of operation.

 [KINDER MORGAN COMMENT TO 20.2.50.113.B(9), C(6), D(3): Kinder Morgan, along with other parties, has supported NMED's proposal in each draft of the Proposed Rules to exempt emergency engines from this 20.2.50.113 NMAC. Early in the rulemaking, Kinder Morgan provided comment and proposed revisions intended resolve concerns of conflict between the state's use of the term "emergency engine" and the federal definition of "emergency engine." NMED has since adopted Kinder Morgan's revisions, reflected in this January 18 Draft. We request the Board adopt these provisions, as drafted, to avoid unintended conflict with federal programs under the Clean Air Act.]

- (10) In lieu of complying with the emission standards for individual engines and turbines established in Subsection B of 20.2.50.113 NMAC, an owner or operator may elect to comply with the emission standards through an Alternative Compliance Plan (ACP) approved by the department. An ACP must include the list of engines or turbines subject to the ACP, and a demonstration that the total allowable emissions for the engines or turbines subject to the ACP will not exceed the total allowable emissions under the emission standards of this Part. Prior to submitting a proposed ACP to the Department, the owner or operator shall comply with the following requirements in the order listed:
- (a) The owner or operator shall contract with an independent third-party engineering or consulting firm to conduct a technical and regulatory review of the ACP proposal. The selected firm shall review the proposal to determine if it meets the requirements of this Part, and shall prepare and certify an evaluation of the proposed ACP indicting whether the ACP proposal adheres to the requirements of this Part.
- **(b)** Following the independent third-party review, the owner or operator shall provide the ACP, along with the third-party evaluation and findings, to the department for posting on the department's website. The department shall post the ACP and the third-party review within 15 days of receipt.
- (c) Following posting by the department, the owner or operator shall publish a notice in a newspaper of general circulation announcing the ACP proposal, the dates it will be available for review and comment by the public, and information on how and where to submit comments. The dates specified in the public notice must provide for a thirty-day comment period.
- (d) Following the close of the thirty-day notice and comment period, the department shall send the comments submitted on the ACP proposal and findings to the owner or operator. The owner or operator shall provide written responses to all comments to the department.
- (e) Following receipt of the owner or operator's responses to comments received during the thirty-day comment period, the department shall make a determination whether to approve or deny the ACP proposal within 90 days. The department shall approve an ACP that meets the requirements of this Part, unless the department determines that the total allowable emissions under the ACP exceed the total allowable emissions under the emission standards of 20.2.50.113 NMAC. If approved by the department, the emission reductions and associated emission limits for the affected engines or turbines shall become enforceable terms under this Part.
- (11) The owner or operator may submit a request for alternative emission standards for a specific engine or turbine based on technical impracticability or economic infeasibility. The owner or operator is not required to submit an ACP proposal under Paragraph (10) of Subsection B of 20.2.50.113 NMAC prior to submission of a request for alternative emissions standards under this Paragraph (11), provided that the owner or operator satisfies Subparagraph (b) of Paragraph (11) of Subsection B of 20.2.50.113 NMAC, below. To qualify for an alternative emission standard, an owner or operator must comply with the following requirements:
- (a) prepare a reasonable demonstration detailing why it is not technically practicable or economically feasible for the individual engine or turbine to achieve the emissions standards in table 1 of Paragraph (2) of Subsection B of 20.2.50.113 NMAC or table 3 of Paragraph (7) of Subsection B of 20.2.50.113 NMAC, as applicable;
- **(b)** prepare a demonstration detailing why emissions from the individual engine or turbine cannot be addressed through an ACP in a technically practicable or economically feasible manner;
- (c) prepare a technical analysis for the affected engine or turbine specifying the emission reductions that can be achieved through other means, such as combustion modifications or capacity limitations. The technical analysis shall include an analysis of any previous modifications of the source and a determination whether such modifications meet the definition of a reconstructed source, such that the source should be considered a new source under federal regulations. The analysis shall include a certification that the modifications to the source are not in violation of any state or federal air quality regulation; and
- (d) fulfill the requirements of Subparagraphs (a) through (c) of Paragraph (10) of Subsection B of 20.2.50.113 NMAC.

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turbine to return to operation.

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Following the close of the thirty-day notice and comment period, the department shall send the comments submitted on the alternative emission standards and findings to the owner or operator. The owner or operator shall provide written responses to all comments to the department.

Following receipt of the owner or operator's responses to comments received during the thirty-day comment period, the department shall make a determination whether to approve or deny the alternative emission standards within 90 days. If approved by the department, the emission reductions and alternative emission standards for the affected engine or turbine shall become enforceable terms under this Part.

If approved by the department, the emissions reductions and alternative standards for the affected engine or turbine shall become enforceable terms under this Part.

[KINDER MORGAN COMMENT TO 20.2.50.113.B(10) and (11): Kinder Morgan supports the two options for alternative compliance with the engines and turbines emissions standards: (i) the alternative compliance plan in Paragraph (10) of Subsection B of 20.2.50.113 NMAC, and (ii) the alternative emissions standard in Paragraph (11) of Subsection B of 20.2.50.113 NMAC. Without these two alternative compliance options, the emissions standards would be technically infeasible and/or cost-prohibitive in many cases.]

IPROPOSED STATEMENT OF REASONS TO BE ADOPTED BY THE BOARD: The Board has determined that while the emissions thresholds provided in Tables 1 and 3 for existing engines and turbines are appropriate in most cases, circumstances may exist where it is technically impracticable or economically infeasible to achieve compliance. In response to this issue, the Board adopts Paragraphs (10) and (11) of Subsection B of 20.2.50.113 NMAC, which allow an operator to present evidence that an alternative compliance option is necessary and appropriate. The owner or operator is not required to submit an ACP proposal under Paragraph (10) of Subsection B prior to submission of a request for an alternative emissions standard under Paragraph (11). It is, however, the Board's expectation that an operator demonstrate why emissions from the individual engine or turbine cannot be addressed through an ACP in a technically practicable or economically feasible manner. Cost-effectiveness thresholds above which a certain control technology will be considered infeasible can vary, but, in general, the Department considers costs in excess of \$7,500 per ton of pollutant reduced to be infeasible. Each technical analysis must include, among other items, a determination of whether any previous modifications of the source cause (or caused) that source to be categorized as a "new" source. It is the Board's expectation that operators will rely on EPA guidance to determine whether a modification has occurred under federal law.]

A short-term replacement engine may be substituted for any engine subject to Section 20.2.50.113 NMAC consistent with any applicable air quality permit containing allowances for short term replacement engines, including but not limited to New Source Review and General Construction Permits issued under 20.2.72 NMAC. A short-term replacement engine is not considered a "new" engine for purposes of this Part unless the engine it replaces is a "new" engine within the meaning of this Part. The reinstallation of the existing engine following removal of the short-term replacement engine is not considered a "new" engine under this Part unless the engine was "new" prior to the temporary replacement.

C. **Monitoring requirements:**

- Maintenance and repair for a spark ignition engine, compression ignition engine, and stationary combustion turbine shall meet the manufacturer recommended maintenance schedule as defined in 20.2.50.112 NMAC.
- Maintenance conducted consistent with an applicable NSPS or NESHAP requirement shall be deemed to be in compliance with 20.2.50.113.C(1) NMAC.
- Catalytic converters (oxidative, selective, and non-selective) and AFR controllers shall be inspected and maintained according to manufacturer specifications as defined in 20.2.50.112 NMAC, and shall include replacement of oxygen sensors as necessary for oxygen-based controllers. During periods of catalytic converter or AFR controller maintenance, the owner or operator shall shut down the engine or turbine until the catalytic converter or AFR controller can be replaced with a functionally equivalent spare to allow the engine or
- For equipment operated for 500 hours per year or more, compliance with the emission standards in Subsection B of 20.2.50.113 NMAC shall be demonstrated within 180 days of the effective date applicable to the source as defined by Subsection B(2) and (7) or, if installed more than 180 days after the effective date, within 60 days after achieving the maximum production rate at which the source will be operated, but not later than 180 days after initial startup of such source. Compliance with the applicable emission standards shall be demonstrated by performing an initial emission test for NOx and VOC, as defined in 40 CFR 51.100(s) using U.S.

1 EPA reference methods or ASTM D6348. Periodic monitoring shall be conducted annually to demonstrate 2 compliance with the allowable emission standards and may be demonstrated utilizing a portable analyzer or EPA 3 reference methods. For units with g/hp-hr emission standards, the engine load shall be calculated using the 4 following equations: 5 Load (Hp) = $\frac{\text{Fuel consumption (scf/hr) x Measured fuel heating value (LHV btu/scf)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100% load or best efficiency}}$ 6 7 Load (Hp) = $\frac{\text{Fuel consumption (gal/hr) x Measured fuel heating value (LHV btu/gal)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100% load or best efficiency}}$ 8 9 10 Where: LVH = lower heating value, btu/scf, or btu/gal, as appropriate; and BSFC = brake specific fuel consumption 11 12 13 If the manufacturer's rated BSFC is not available, an operator may use an alternative load calculation methodology based on available data. 14 15 emissions testing shall be conducted within 10 percent of 100 percent peak (or 16 the highest achievable) load. The load and the parameters used to calculate it shall be recorded to document 17 operating conditions at the time of testing and shall be included with the test report. 18 emissions testing utilizing a portable analyzer shall be conducted in accordance 19 with the requirements of the current version of ASTM D6522. If a portable analyzer has met a previously approved 20 department criterion, the analyzer may be operated in accordance with that criterion until it is replaced. 21 the default time period for a test run shall be at least 20 minutes. (c) 22 an emissions test shall consist of three separate runs, with the arithmetic mean of (d) 23 the results from the three runs used to determine compliance with the applicable emission standard. 24 during emissions tests, pollutant and diluent concentration shall be monitored and recorded. Fuel flow rate shall be monitored and recorded if stack gas flow rate is determined utilizing U.S. EPA 25 reference method 19. This information shall be included with the periodic test report. 26 27 stack gas flow rate shall be calculated in accordance with U.S. EPA reference 28 method 19 utilizing fuel flow rate (scf) determined by a dedicated fuel flow meter and fuel heating value (Btu/scf). 29 The owner or operator shall provide a contemporaneous fuel gas analysis (preferably on the day of the test, but no 30 earlier than three months before the test date) and a recent fuel flow meter calibration certificate (within the most 31 recent quarter) with the final test report. Alternatively, stack gas flow rate may be determined by using U.S. EPA 32 reference methods 1 through 4 or through the use of manufacturer provided fuel consumption rates. 33 upon request by the department, an owner or operator shall submit a notification **(g)** 34 and protocol for an initial or annual emissions test. 35 emissions testing shall be conducted at least once per calendar year. Emission (h) 36 testing required by Subparts GG, IIII, JJJJ, or KKKK of 40 CFR 60, or Subpart ZZZZ of 40 CFR 63, may be used to satisfy the emissions testing requirements if it meets the requirements of 20.2.50.113 NMAC and is completed at 37 38 least once per calendar year. 39 The results of emissions testing demonstrating compliance with the emission 40 standard for CO may be used as a surrogate to demonstrate compliance with the emission standard for NMNEHC. The owner or operator of equipment operated less than 500 hours per year shall monitor 41 42 the hours of operation using a non-resettable hour meter and shall test the unit at least once per 8760 hours of 43 operation in accordance with the emissions testing requirements in Paragraph (4) of Subsection C of 20.2.50.113 44 NMAC. 45 An owner or operator of an emergency use engine as defined by 40 C.F.R. §§ 60.4211, 46 60.4243, or 63.6675 shall monitor the hours of operation by a non-resettable hour meter. 47 An owner or operator limiting the annual operating hours of an engine or turbine to meet 48 the requirements of Paragraph (2) or (7) of Subsection B of 20.2.50.113 NMAC shall monitor the hours of operation 49 by a non-resettable hour meter. 50 Prior to any monitoring, testing, inspection, or maintenance of an engine or turbine, the 51 owner or operator shall date and time stamp the event, and the monitoring data entry shall be made in accordance

Recordkeeping requirements:

with the requirements of 20.2.50.112 and 113 NMAC.

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1		ner or operator of a spark ignition engine, compression ignition engine, or
2	stationary combustion turbine shall	maintain a record in accordance with 20.2.50.112 NMAC for the engine or
3	turbine. The record shall include:	
4	(a)	the make, model, serial number, and unique identification number for the engine
5	or turbine;	
6	(b)	location of the source (latitude and longitude);
7	(c)	a copy of the engine, turbine, or control device manufacturer recommended
8		s defined in 20.2.50.112 NMAC; and
9	(d)	all inspection, maintenance, or repair activity on the engine, turbine, and control
10	device, including:	an inspection, maintenance, or repair activity on the engine, turbine, and control
	device, including.	(c) 41 - 1-4 14:
11	inspection maintanance or namein	(i) the date and time stamp(s), including GPS of the location, of an
12	inspection, maintenance, or repair;	
13		(ii) the date a subsequent analysis was performed (if applicable);
14		(iii) the name of the person(s) conducting the inspection, maintenance or
15	repair;	
16		(iv) a description of the physical condition of the equipment as found
17	during the inspection;	
18		(v) a description of maintenance or repair conducted; and
19		(vi) the results of the inspection and any required corrective actions.
20	(2) The own	ner or operator of a spark ignition engine, compression ignition engine, or
21	stationary combustion turbine shall	maintain records of initial and annual emissions testing for the engine or turbine
22	for a period of five years. The reco	ords shall include:
23	(a)	make, model, and serial number for the tested engine or turbine;
24	(b)	the date and time stamp(s), including GPS of the location, of any monitoring
25	event, including sampling or measu	
26	(c)	date analyses were performed;
27	(d)	name of the person(s) and the qualified entity that performed the analyses;
28	(e)	analytical or test methods used;
29	(f)	results of analyses or tests;
30	(1) (g)	calculated emissions of NOx and VOC in lb/hr and tpy; and
31	(g) (h)	operating conditions at the time of sampling or measurement.
32		ner or operator of an emergency use engine as defined by 40 C.F.R. §§ 60.4211,
33		the total annual hours of operation as recorded by the non-resettable hour meter.
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		ner or operator limiting the annual operating hours of an engine or turbine to meet
35		or (7) of Subsection B of 20.2.50.113 NMAC shall record the hours of operation
36		e owner or operator shall calculate and record the annual NOx and VOC emission
37		turbine's actual hours of operation, to demonstrate that an equivalent allowable
38		set forth in table 1 or table 3 of Paragraph (2) or (7) of Subsection B of
39		five percent emission reduction requirement is met.
40		irements: The owner or operator shall comply with the reporting requirements in
41	20.2.50.112 NMAC.	
42	[20.2.50.113 NM–C - N, XX/XX/2	0021]
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44	20.2.50.114 COMPRESSOR	R SEALS:
45	A. Applicability:	
46	(1) Centrifu	igal compressors using wet seals and located at tank batteries, gathering and
47	boosting stations, and natural gas p	processing plants are subject to the requirements of 20.2.50.114 NMAC.
48		well sites and transmission compressor stations are not subject to the
49	requirements of 20.2.50.114 NMA	1
50		cating compressors located at tank batteries, gathering and boosting stations, and
51		ibject to the requirements of 20.2.50.114 NMAC. Reciprocating compressors

[KINDER MORGAN COMMENT TO 20.2.50.114: As discussed in Kinder Morgan's Closing Argument,

located at well sites and transmission compressor stations are not subject to the requirements of 20.2.50.114 NMAC.

Kinder Morgan supports the Department's reasonable position to exempt transmission compressor stations from this 20.2.50.114 NMAC addressing compressor seals. As Kinder Morgan testified, and as recognized by the

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Department, the VOC content of the natural gas that Kinder Morgan transports is very low. In light of this low VOC 1 2 content, and in turn, the low VOC emissions, controlling emissions from existing wet seals would almost certainly 3 be cost-prohibitive. Replacing wet seals with dry seals also presents cost concerns and could result in undesirable 4 operational consequences that further exacerbate costs.]

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[PROPOSED STATEMENT OF REASONS TO BE ADOPTED BY THE BOARD: This 20.2.50.114 NMAC regarding compressor seals applies to centrifugal and reciprocating compressors located at tank batteries, gathering and boosting stations, and natural gas processing plants. The Board has determined, based on evidence presented in the record, that it is cost-prohibitive to control VOC emissions from compressor seals at transmission compressor stations and specifically exempts those sources from this rule section on that basis.]

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В. **Emission standards:**

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The owner or operator of an existing centrifugal compressor with wet seals shall control VOC emissions from a centrifugal compressor wet seal fluid degassing system by at least ninety-five percent within two years of the effective date of this Part. Emissions shall be captured and routed via a closed vent system to a control device, recovery system, fuel cell, or a process stream.

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The owner or operator of an existing reciprocating compressor shall, either:

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replace the reciprocating compressor rod packing after every 26,000 hours of compressor operation or every 36 months, whichever is reached later. The owner or operator shall begin counting the hours of compressor operation toward the first replacement of the rod packing upon the effective date of this

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beginning no later than two years from the effective date of this Part, collect emissions from the rod packing, and route them via a closed vent system to a control device, recovery system, fuel cell, or a process stream.

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The owner or operator of a new centrifugal compressor with wet seals shall control VOC emissions from the centrifugal compressor wet seal fluid degassing system by at least ninety-five percent upon startup. Emissions shall be captured and routed via a closed vent system to a control device, recovery system, fuel cell, or process stream.

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(4) The owner or operator of a new reciprocating compressor shall, upon startup, either:

replace the reciprocating compressor rod packing after every 26,000 hours of compressor operation, or every 36 months, whichever is reached later; or

collect emissions from the rod packing and route them via a closed vent system **(b)** to a control device, a recovery system, fuel cell, or a process stream.

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The owner or operator complying with the emission standards in Subsection B of 20.2.50.114 NMAC through use of a control device shall comply with the control device requirements in 20.2.50.115 NMAC.

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C. **Monitoring requirements:**

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The owner or operator of a reciprocating compressor complying with Subparagraph (a) of Paragraph (2) or Subparagraph (a) of Paragraph (4) of Subsection B of 20.2.50.114 NMAC shall continuously monitor the hours of operation with a non-resettable hour meter and track the number of hours since initial startup or since the previous reciprocating compressor rod packing replacement.

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The owner or operator of a reciprocating compressor complying with Subparagraph (b) of Paragraph (2) or Subparagraph (b) of Paragraph (4) of Subsection B of 20.2.50.114 NMAC shall monitor the rod packing emissions collection system semiannually to ensure that it operates as designed and routes emissions through a closed vent system to a control device, recovery system, fuel cell, or process stream.

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The owner or operator of a centrifugal or reciprocating compressor complying with the requirements in Subsection B of 20.2.50.114 NMAC through use of a closed vent system or control device shall comply with the monitoring requirements in 20.2.50.115 NMAC.

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The owner or operator of a centrifugal or reciprocating compressor shall comply with the monitoring requirements in 20.2.50.112 NMAC.

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D. **Recordkeeping requirements:**

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The owner or operator of a centrifugal compressor using a wet seal fluid degassing system shall maintain a record of the following:

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the location (latitude and longitude) of the centrifugal compressor; (a)

the date of construction or reconstruction of the centrifugal compressor; **(b)**

the monitoring required in Subsection C of 20.2.50.114 NMAC, including the (c)

1 time and date of the monitoring, the person(s) conducting the monitoring, a description of any problem observed 2 during the monitoring, and a description of any corrective action taken; and 3 the type, make, model, and unique identification number or equivalent identifier 4 of a control device used to comply with the control requirements in Subsection B of 20.2.50.114 NMAC. 5 6 The owner or operator of a reciprocating compressor shall maintain a record of the following: 7 (a) the location (latitude and longitude) of the reciprocating compressor; 8 the date of construction or reconstruction of the reciprocating compressor; and **(b)** 9 (c) the monitoring required in Subsection C of 20.2.50.114 NMAC, including: 10 the number of hours of operation since the effective date, initial startup 11 after the effective date, or the last rod packing replacement, as applicable; 12 (ii) data showing the effectiveness of the rod packing emissions collection 13 system, as applicable; and 14 the time and date of the inspection, the person(s) conducting the (iii) 15 inspection, a description of any problems observed during the inspection, and a description of corrective actions 16 taken. 17 The owner or operator of a centrifugal or reciprocating compressor complying with the 18 requirements in Subsection B of 20.2.50.114 NMAC through use of a control device or closed vent system shall 19 comply with the recordkeeping requirements in 20.2.50.115 NMAC. 20 The owner or operator of a centrifugal or reciprocating compressor shall comply with the 21 recordkeeping requirements in 20.2.50.112 NMAC. 22 Reporting requirements: The owner or operator of a centrifugal or reciprocating compressor 23 shall comply with the reporting requirements in 20.2.50.112 NMAC. 24 [20.2.50.114 NM-C - N, XX/XX/2021] 25 26 20.2.50.115 CONTROL DEVICES AND CLOSED VENT SYSTEMS: 27 28 [REDACTED] 29 30 31 32 33 34 20.2.50.116 **EQUIPMENT LEAKS AND FUGITIVE EMISSIONS:** 35 Applicability: Well sites, tank batteries, gathering and boosting stations, natural gas processing Α. plants, transmission compressor stations, and associated piping and components are subject to the requirements of 36 37 20.2.50.116 NMAC. Components in water or air service are not subject to the requirements of 20.2.50.116 NMAC. 38 The requirements of this Part may be considered in the facility-wide PTE and in determining the monitoring 39 frequency requirements of this Section. 40 Emission standards: The owner or operator of oil and gas production and processing equipment 41 located at well sites, tank batteries, gathering and boosting stations, natural gas processing plants, or transmission 42 compressor stations shall demonstrate compliance with this Part by performing the monitoring, recordkeeping, and 43 reporting requirements specified in 20.2.50.116 NMAC. Tank batteries supporting multiple facilities are subject to 44 the requirements for the most stringently regulated facility of which they are a part. 45 **Default Monitoring requirements:** Owners and operators shall comply with the following C.

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monitoring requirements:

components as follows:

(a) conduct an external visual inspection for defects, which may include cracks, holes, or gaps in piping or covers; loose connections; liquid leaks; broken or missing caps; broken, cracked or otherwise damaged seals or gaskets; broken or missing hatches; or broken or open access covers or other closure or bypass devices;

daily throughput of greater than 10 barrels of oil per day or an average daily production of greater than 60,000

standard cubic feet per day of natural gas shall, at least weekly, conduct an external audio, visual, and olfactory

valves or lines, valves, flanges, connectors, piping, and associated equipment to identify defects and leaking

(AVO) inspections of thief hatches, closed vent systems, pumps, compressors, pressure relief devices, open-ended

The owner or operator of a facility with an annual average daily production or average

1 **(b)** conduct an audio inspection for pressure leaks and liquid leaks; 2 (c) conduct an olfactory inspection for unusual or strong odors; and 3 (d) any positive detection during the AVO inspection shall be repaired in 4 accordance with Subsection E if not repaired at the time of discovery. 5 The owner or operator of a facility with an annual average daily production or average 6 daily throughput of equal to or less than 10 barrels of oil per day or an average daily production of equal to or less 7 than 60,000 standard cubic feet per day of natural gas shall, at least monthly, conduct an external audio, visual, and 8 olfactory (AVO) inspection of thief hatches, closed vent systems, pumps, compressors, pressure relief devices, open-9 ended valves or lines, valves, flanges, connectors, piping, and associated equipment to identify defects and leaking 10 components as specified in Subparagraphs (a) through (d) of Paragraph (1) of Subsection (C) of 20.2.50.116 11 NMAC. 12 The owner or operator of the following facilities shall conduct an inspection using U.S. 13 EPA method 21 or optical gas imaging (OGI) of thief hatches, closed vent systems, pumps, compressors, pressure 14 relief devices, open-ended valves or lines, valves, flanges, connectors, piping, and associated equipment to identify 15 leaking components at a frequency determined according to the following schedules, and upon request by the 16 department for good cause shown: 17 for existing well sites and standalone tank batteries, the owner or operator shall 18 comply with these requirements no later than two years from the effective date of this Part. 19 for well sites and standalone tank batteries: 20 annually at facilities with a PTE less than two tpy VOC; (i) 21 (ii) semi-annually at facilities with a PTE equal to or greater than two tpy 22 and less than five tpy VOC; and 23 quarterly at facilities with a PTE equal to or greater than five tpy VOC. (iii) 24 for gathering and boosting stations and natural gas processing plants: (c) 25 quarterly at facilities with a PTE less than 25 tpy VOC; and (i) 26 (ii) monthly at facilities with a PTE equal to or greater than 25 tpy VOC. 27 for transmission compressor stations, quarterly or in compliance with the federal (d) 28 equipment leak and fugitive emissions monitoring requirements of New Source Performance Standards, 40 C.F.R. 29 Part 60, as may be revised, so long as the federal equipment leak and fugitive emissions monitoring requirements are 30 at least as stringent as the New Source Performance Standards OOOOa, 40 CFR Part 60, in existence as of the 31 effective date of this Part. 32 33 [KINDER MORGAN COMMENT TO 20.2.50.116.C.(3)(d): As discussed in Kinder Morgan's Closing 34 Argument (pp. 10-11), during the hearing, the Department acknowledged that the VOC content of the natural gas 35 that is present at transmission compressor stations is much lower than in other segments. The Department also acknowledged that, for this reason, transmission compressor stations should be treated differently from gathering 36 37 and boosting stations and natural gas processing plants with respect to required LDAR inspections. Accordingly, 38 the Department stated that it supports the Joint Proposal presented by EDF and Kinder Morgan, and reflected in this 39 20.2.50.116.C.(3)(d) NMAC.] 40 41 [PROPOSED STATEMENT OF REASONS TO BE ADOPTED BY THE BOARD: The Board acknowledges 42 43 44

that many sources, including many transmission compressor stations, are subject to the U.S. Environmental Protection Agency's leak detection and repair ("LDAR") program. The Board also acknowledges that the federal LDAR program may differ from the state LDAR program, creating implementation challenges. Compounding these matters is the fact that the VOC content of natural gas present at a transmission compressor station is very low relative to the natural gas in other segments of the oil and gas industry. To address these issues, the Board adopts 20.2.50.116.C.(3)(d) NMAC, which affords transmission compressor stations two compliance options for the frequency of monitoring under Paragraph (3) of Subsection C of 20.2.50.116 NMAC: (1) conduct quarterly monitoring, or (2) comply with equipment leak and fugitive emissions monitoring requirements set out in federal NSPS so long as such standards are at least as stringent as the NSPS OOOOa, 40 C.F.R. Part 60, as in existence on the effective date of the Proposed Rules. This approach ensures that transmission compressor stations are monitoring at least quarterly while appropriately managing overlap with the federal LDAR program.]

> for well sites within 1,000 feet of an occupied area: (e)

- quarterly at facilities with a PTE less than 5 tpy VOC; and
- (ii) monthly at facilities with a PTE equal to or greater than 5 tpy VOC.

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1 for existing wellhead only facilities, annual inspections shall be completed on 2 the following schedule: 30% by January 1, 2024; 65% by January 1, 2025; and 100% by January 1, 2026. 3 for inactive well sites: (g) 4 for well sites that are inactive on or before the effective date of this (i) 5 Part, annually beginning within 6 months of the effective date of this Part; 6 for well sites that become inactive after the effective date of this Part, (ii) 7 annually beginning 30 days after the site becomes an inactive well site. 8 Inspections using U.S. EPA method 21 shall meet the following requirements: 9 the instrument shall be calibrated before each day of use by the procedures 10 specified in U.S. EPA method 21 and the instrument manufacturer; and 11 a leak is detected if the instrument records a measurement of 500 ppm or greater 12 of hydrocarbons, and the measurement is not associated with normal equipment operation, such as pneumatic device 13 actuation and crank case ventilation. 14 **(5)** Inspections using OGI shall meet the following requirements: 15 the instrument shall comply with the specifications, daily instrument checks, and 16 leak survey requirements set forth in Subparagraphs (1) through (3) of Paragraph (i) of 40 CFR 60.18; and 17 **(b)** a leak is detected if the emission images recorded by the OGI instrument are not 18 associated with normal equipment operation, such as pneumatic device actuation or crank case ventilation. 19 Components that are difficult, unsafe, or inaccessible to monitor, as determined by the 20 following conditions, are not required to be inspected until it becomes feasible to do so: 21 difficult to monitor components are those that require elevating the monitoring 22 personnel more than two meters above a supported surface; 23 unsafe to monitor components are those that cannot be monitored without 24 exposing monitoring personnel to an immediate danger as a consequence of completing the monitoring; and 25 inaccessible to monitor components are those that are buried, insulated, or 26 obstructed by equipment or piping that prevents access to the components by monitoring personnel. 27 Owners and operators of well sites subject to the requirements in Subparagraph (e) of 28 Paragraph (3) of Subsection C of Section 20.2.50.116 NMAC must conduct an evaluation to determine applicability 29 within 30 days of constructing a new well site, and within 90 days of the effective date of this Part for existing well 30 31 An owner or operator conducting an evaluation pursuant to Paragraph (7) of Subsection 32 C of Section 20.2.50.116 NMAC shall measure the distance from the latitude and longitude of each well at a well site to the following points for each type of occupied area: 33 34 the property line for indoor or outdoor spaces associated with a school that 35 students use commonly as part of their curriculum or extracurricular activities and outdoor venues or recreation 36 areas: 37 the property line for outdoor venues or recreation areas, such as a playground, **(b)** 38 permanent sports field, amphitheater, or other similar place of outdoor public assembly; 39 the location of a building or structure used as a place of residency by a person, a (c) 40 family, or families; and 41 the location of a commercial facility with five-thousand (5,000) or more spare 42 feet of building floor area that is operating and normally occupied during working hours. 43 Injection well sites and temporarily abandoned well sites are not subject to the leak 44 survey requirements of Paragraphs (3) through (6) of Subsection C of 20.2.50.116 NMAC. 45 (10)Prior to any monitoring event, the owner or operator shall date and time stamp the 46 monitoring event. 47 D. Alternative equipment leak monitoring plans: An owner or operator may comply with the 48 equipment leak requirements of Subsection C of 20.2.50.116 NMAC through an equally effective and enforceable 49 alternative monitoring plan as follows: 50 An owner or operator may comply with an individual alternative monitoring plan, subject **(1)** 51 to the following requirements: 52 the proposed alternative monitoring plan shall be submitted to and approved by (a) 53 the department prior to conducting monitoring under that plan. 54 the department may terminate an approved alternative monitoring plan if the

department finds that the owner or operator failed to comply with a provision of the plan and failed to correct and

disclose the violation to the department within 15 calendar days of identifying the violation.

1		(c)	upon department denial or termination of an approved alternative monitoring
2	plan, the owner or operator		omply with the default monitoring requirements of Subsection C of 20.2.50.116
3	NMAC within 15 days.		
4	(2)	An owne	er or operator may comply with a pre-approved monitoring plan maintained by
5	the department, subject to		
6	1		the owner or operator shall notify the department of the intent to conduct
7	monitoring under a pre-ap		nonitoring plan, and identify which pre-approved plan will be used, at least 15
8	days prior to conducting the	he first me	onitoring under that plan.
9		(b)	the department may terminate the use of a pre-approved monitoring plan by the
10	owner or operator if the de	epartment	t finds that the owner or operator failed to comply with a provision of the plan
11	and failed to correct and d	isclose th	ne violation to the department within 15 calendar days of identifying the violation.
12			upon department denial or termination of an approved alternative monitoring
13		r shall co	omply with the default monitoring requirements of Subsection C of 20.2.50.116
14	NMAC within 15 days.		
15		requirem	nents: For a leak detected pursuant to monitoring conducted under 20.2.50.116
16	NMAC:		
17	(1)		er or operator shall place a visible tag on the leaking component not otherwise
18	=		ntil the component has been repaired;
19	(2)		all be repaired as soon as practicable but no later than 30 days from discovery;
20	(3)		pment must be re-monitored no later than 15 days after the repair of the leak to
21	demonstrate that it has been		
22	(4)		ak cannot be repaired within 30 days of discovery without a process unit
23			ted "Repair delayed," the date of the next scheduled unit shutdown must be
24		ist be repa	aired before the end of the scheduled process unit shutdown or within 2 years,
25	whichever is earlier.	.0.1 1	
26	(5)		ak cannot be repaired within 30 days of discovery due to shortage of parts, the
27			layed," and must be repaired within 15 days of resolution of such shortage.
28			requirements:
29	(1)		ner or operator shall keep a record of the following for all AVO, RM 21, OGI, or
30			ing inspections conducted as required under 20.2.50.116 NMAC, and shall
31 32	provide the record to the d		
			facility location (latitude and longitude);
33 34			time and date stamp, including GPS of the location, of any monitoring; monitoring method (e.g. AVO, RM 21, OGI, approved alternative method);
35		` /	name of the person(s) performing the inspection;
36		(d) (e)	a description of any leak requiring repair or a note that no leak was found; and
37			whether a visible tag was placed on the leak or not;
38	(2)		ner or operator shall keep the following record for any leak that is detected:
39	(2)		the date the leak is detected;
40		()	the date of attempt to repair;
41			for a leak with a designation of "repair delayed" the following shall be recorded:
42		(0)	(i) reason for delay if a leak is not repaired within the required number of
43	days after discovery. If a	lelav is di	ue to a parts shortage, a record documenting the attempt to order the parts and the
44	unavailability due to a sho		
45		56	(ii) the date of next scheduled process unit shutdown by which the repair
46	will be completed; and		
47	1		(iii) name of the person(s) who determined that the repair could not be
48	implemented without a pro-	ocess unit	
49	•		date of successful leak repair;
50			date the leak was monitored after repair and the results of the monitoring; and
51		(f)	a description of the component that is designated as difficult, unsafe, or
52	inaccessible to monitor, an	n explanat	tion stating why the component was so designated, and the schedule for repairing
53	and monitoring the compo	nent.	
54	(3)		ak detected using OGI, the owner or operator shall keep records of the
55	specifications, the daily in		check, and the leak survey requirements specified at 40 CFR 60.18(i)(1)-(3).
56	(4)	The own	ner or operator shall comply with the recordkeeping requirements in 20.2.50.112

1	NMAC.		
2		G.	Reporting requirements:
3		G 1	The owner or operator shall certify the use of an alternative equipment leak monitoring
4	plan und	er Subse	ection D of 20.2.50.116 NMAC to the department annually, if used.
5	NMAC.		(2) The owner or operator shall comply with the reporting requirements in 20.2.50.112
6 7		116 NIM	IAC N VV/VV/2021
8	[20.2.30	.110 1010	[AC - N, XX/XX/2021]
9	20.2.50.	117	NATURAL GAS WELL LIQUID UNLOADING:
0	20.2.30.	11/	NATURAL GAS WELL LIQUID UNLOADING.
1	[REDA	CTEDI	
12	[ILLDIII	CILD	
13	*	*	*
4			
15			
16	20.2.50.	118	GLYCOL DEHYDRATORS:
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18	[REDAC	CTED]	
9			
20	*	*	*
21			
22	20.2.50	110	HE AMERIC
23	20.2.50.	119	HEATERS:
24 25	IDEDA	CTEDI	
25 26	[REDA	CIED	
27	*	*	*
28			
29			
30	20.2.50.	120	HYDROCARBON LIQUID TRANSFERS:
31			
32	[REDAC	CTED]	
33			
34	*	*	*
35			
36			
37	20.2.50.		PIG LAUNCHING AND RECEIVING:
88		Α.	Applicability: Individual pipeline pig launcher and receiver operations with a PTE equal to or
39			tpy VOC located within the property boundary of, and under common ownership or control with,
10 11			atteries, gathering and boosting stations, natural gas processing plants, and transmission compressor
11 12	stations	are subje B.	ect to the requirements of 20.2.50.121 NMAC. Emission standards:
13		D.	(1) Owners and operators of affected pipeline pig launcher and receiver operations shall
14	canture a	and redu	ce VOC emissions from pigging operations by at least ninety-five percent within two years of the
15			this Part. If a combustion control device is used, the combustion device shall have a minimum design
16			ency of ninety-eight percent.
17	1110 600		(2) The owner or operator conducting an affected pig launching and receiving operation
18	shall:		() I was a series of the seri
19			(a) employ best management practices to minimize the liquid present in the pig
50	receiver	chamber	r and to minimize emissions from the pig receiver chamber to the atmosphere after receiving the pig
51			chamber and before opening the receiving chamber to the atmosphere;
52			(b) employ a method to prevent emissions, such as installing a liquid ramp or drain,
53			essure chamber to a low-pressure line or vessel, using a ball valve type chamber, or using multiple
54	pig chan	nbers;	
55	.1		(c) recover and dispose of receiver liquid in a manner that minimizes emissions to
56	the atmo	sphere to	o the extent practicable; and

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(d)

manner compliant with state law.

The emission standards in Paragraphs (1) and (2) of Subsection B of 20.2.50.121 NMAC

the launcher or receiver operation are less than one tpv of VOC.

cease to apply to an individual pipeline pig launching and receiving operation if the actual annual VOC emissions of An owner or operator complying with Paragraph (2) of Subsection B of 20.2.50.121

ensure that the material collected is returned to the process or disposed of in a

NMAC through use of a control device shall comply with the control device requirements in 20.2.50.115 NMAC. C. **Monitoring requirements:**

The owner or operator of an affected pig launching and receiving site shall inspect the equipment for leaks using AVO, RM 21, or OGI on either: a monthly basis if pigging operations at a site occur on a monthly basis or more

(a) frequently; or

prior to the commencement and after the conclusion of the pig launching or **(b)** receiving operation, if less frequent.

The monitoring shall be performed using the methodologies outlined in Subsection (C) of

An owner or operator complying with Paragraph (1) of Subsection B of 20.2.50.121

The owner or operator shall comply with the monitoring requirements in 20.2.50.112

the pigging operation, including the location, date, and time of the pigging operation;

the data and methodology used to estimate the actual emissions to the atmosphere and

The owner or operator shall comply with the recordkeeping requirements in 20.2.50.112

Reporting requirements: The owner or operator shall comply with the reporting requirements in

Applicability: Natural gas-driven pneumatic controllers and pumps located at well sites, tank

Recordkeeping requirements: The owner or operator of an affected pig launching and receiving

date and time of any monitoring and the results of the monitoring; and

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KINDER MORGAN COMMENT TO 20.2.50.121.C.(1)(b): As discussed in Kinder Morgan's prior filings, infrequent pigging in the transmission segment coupled with the low VOC content natural gas present in the transmission segment results in very low VOC emissions from transmission pigging operations. In fact, Kinder Morgan presented data demonstrating that annual VOC emissions from certain of the company's compressor stations in 2020 and 2019 were less than 0.04 tpy per compressor station. It would be unreasonable to require transmission compressor station operators to monitor pigging units monthly when they are pigging every 2 to 5 years. 20.2.50.121.C.(1)(b) NMAC addresses this concern by requiring monitoring prior to and after the conclusion of pigging operations, if pigging operations at a site occur less frequently than once per month.]

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IPROPOSED STATEMENT OF REASONS TO BE ADOPTED BY THE BOARD: Some pigging units may be pigged far less frequently than monthly. For example, evidence was presented to the Board demonstrating that some pigging units located at transmission compressor stations are pigged only every 2 to 5 years. Thus, the Board adopts 20.3.50.121.C(1)(b) NMAC to avoid the unintended consequence of operators conducting monthly monitoring with little if any corresponding emissions reduction benefit.]

NMAC through use of a control device shall comply with the monitoring requirements in 20.2.50.115 NMAC.

the type of control device and its make and model.

PNEUMATIC CONTROLLERS AND PUMPS:

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20.2.50.116 NMAC as applicable and at the frequency required in Paragraph (1) of Subsection (C) of 20.2.50.121 NMAC. The monitoring shall be performed when the pig trap is under pressure.

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55 56 subject to the requirements of 20.2.50.122 NMAC. B.

[20.2.50.121 NMAC - N, XX/XX/2021]

site shall maintain a record of the following:

(1)

(2)

(3)

(4)

(5)

used to estimate the PTE;

Ε.

20.2.50.112 NMAC.

Emission standards:

A new natural gas-driven pneumatic controller or pump shall comply with the

batteries, gathering and boosting stations, natural gas processing plants, and transmission compressor stations are

PROPOSED 20.2.50 NMAC - January 18, 2022 Version Page 21

 requirements of 20.2.50.122 NMAC upon startup.

- (2) An existing natural gas-driven pneumatic pump shall comply with the requirements of 20.2.50.122 NMAC within three years of the effective date of this Part.
- (3) An existing natural gas-driven pneumatic controller shall comply with the requirements of 20.2.50.122 NMAC according to the following schedule:

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Table 1 – WELL SITES, STANDALONE TANK BATTERIES, GATHERING AND BOOSTING STATIONS

Total Historic Percentage	Total Required	Total Required	Total Required
of Non-Emitting	Percentage of Non-	Percentage of Non-	Percentage of Non-
Controllers	Emitting Controllers by	Emitting Controllers by	Emitting Controllers by
	January 1, 2024	January 1, 2027	January 1, 2030
> 75%	80%	85%	90%
> 60-75%	80%	85%	90%
> 40-60%	65%	70%	80%
> 20-40%	45%	70%	80%
0-20%	25%	65%	80%

Table 2 – TRANSMISSION COMPRESSOR STATIONS AND GAS PROCESSING PLANTS

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Total Historic Percentage	Total Required	Total Required	Total Required
of Non-Emitting	Percentage of Non-	Percentage of Non-	Percentage of Non-
Controllers	Emitting Controllers by	Emitting Controllers by	Emitting Controllers by
	January 1, 2024	January 1, 2027	January 1, 2030
> 75%	80%	95%	98%
> 60-75%	80%	95%	98%
> 40-60%	65%	95%	98%
> 20-40%	50%	95%	98%
0-20%	35%	95%	98%

- (4) Standards for natural gas-driven pneumatic controllers.
 - (a) new pneumatic controllers shall have an emission rate of zero.
- **(b)** existing pneumatic controllers shall meet the required percentage of non-emitting controllers within the deadlines in tables 1 and 2 of Paragraph (3) of Subsection B of 20.2.50.122 NMAC, and shall comply with the following:

[KINDER MORGAN COMMENT TO 20.2.50.122.B.(4)(b): As discussed in Kinder Morgan's Closing Argument (pp. 12-15), the Department reasonably decided to strike 20.2.50.122.B.(4)(b) NMAC reflected in the September 16 Version of 20.2.50 NMAC. That prior language would have required existing pneumatic controllers with access to commercial line electric power to install/retrofit to zero bleed pneumatic controllers within 2 years of the effective date of this subpart. During hearing, the Department recognized that that provision, unsupported by technical feasibility and cost data, would come in direct conflict with Table 2, and would result in problematic outcomes. For example, while transmission compressor stations are typically tied into commercial line electric power, that does not mean that the station has adequate power to install additional equipment or sufficient infrastructure in place to route power to that a particular piece of additional equipment. The Department confirmed its intent that operators of transmission compressor stations and gas processing plants comply with the requirements of Table 2, and we ask the Board to adopt this section as proposed.]

[PROPOSED STATEMENT OF REASONS TO BE ADOPTED BY THE BOARD: It is the Board's intent to set aggressive, yet achievable, targets for operators to retrofit or replace existing pneumatic controllers with non-emitting controllers. The schedules set forth in Tables 1 and 2 achieve this outcome.]

(i) by January 1, 2023, the owner or operator shall determine the total controller count for all controllers at all of the owner or operator's affected facilities that commenced construction before the effective date of this Part. The total controller count must include all emitting pneumatic controllers and all non-emitting pneumatic controllers, except that pneumatic controllers necessary for a safety or process purpose

that cannot otherwise be met without emitting natural gas shall not be included in the total controller count.

(ii) determine which controllers in the total controller count are non-emitting and sum the total number of non-emitting controllers and designate those as total historic non-emitting controllers.

(iii) determine the total historic non-emitting percent of controllers by dividing the total historic non-emitting controller count by the total controller count and multiplying by 100.

 (iv) based on the percent calculated in (iii) above, the owner or operator shall determine which provisions of tables 1 and 2 of Paragraph (3) of Subsection B of 20.2.50.122 NMAC apply and the replacement schedule the owner or operator must meet.

 (v) if an owner or operator meets at least seventy-five percent total non-emitting controllers by January 1, 2025, the owner or operator is not subject to the requirements of tables 1 and 2 of Paragraph (3) of Subsection B of 20.2.50.122 NMAC.

(vi) if after January 1, 2027, an owner or operator's remaining pneumatic controllers are not cost-effective to retrofit, the owner or operator may submit a cost analysis of retrofitting those remaining units to the department. The department shall review the cost analysis and determine whether those units qualify for a waiver from meeting additional retrofit requirements.

(c) a pneumatic controller with a bleed rate greater than six standard cubic feet per hour is permitted when the owner or operator has demonstrated that a higher bleed rate is required based on functional needs, including response time, safety, and positive actuation. An owner or operator that seeks to maintain operation of an emitting pneumatic controller must prepare and document the justification for the safety or process purpose prior to the installation of a new emitting controller or the retrofit of an existing controller. The justification shall be certified by a qualified professional or inhouse engineer.

(d) Temporary pneumatic controllers that emit natural gas and are used for well abandonment activities or used prior to or through the end of flowback, and pneumatic controllers used as emergency shutdown devices located at a well site, are not subject to the requirements of Subsection B of 20.2.50.122 NMAC.

(e) Temporary or portable pneumatic controllers that emit natural gas and are onsite for less than 90 days are not subject to the requirements of Subsection B of 20.2.50.122 NMAC.

(5) Standards for natural gas-driven pneumatic diaphragm pumps.

 (a) new pneumatic diaphragm pumps located at natural gas processing plants shall have an emission rate of zero.

(b) new pneumatic diaphragm pumps located at well sites, tank batteries, gathering and boosting stations, or transmission compressor stations with access to commercial line electrical power shall have an emission rate of zero.

(c) existing pneumatic diaphragm pumps located at well sites, tank batteries, gathering and boosting stations, natural gas processing plants, or transmission compressor stations with access to commercial line electrical power shall have an emission rate of zero within two years of the effective date of this Part.

(d) owners and operators of pneumatic diaphragm pumps located at well sites, tank batteries, gathering and boosting stations, or transmission compressor stations without access to commercial line electrical power shall reduce VOC emissions from the pneumatic diaphragm pumps by ninety-five percent if it is technically feasible to route emissions to a control device, fuel cell, or process. If there is a control device available onsite but it is unable to achieve a ninety-five percent emission reduction, and it is not technically feasible to route the pneumatic diaphragm pump emissions to a fuel cell or process, the owner or operator shall route the pneumatic diaphragm pump emissions to the control device within two years of the effective date of this Part.

C. Monitoring requirements:

(1) Pneumatic controllers or diaphragm pumps not using natural gas or other hydrocarbon gas as a motive force are not subject to the monitoring requirements in Subsection C of 20.2.50.122 NMAC.

 (2) The owner or operator of a facility with one or more natural gas-driven pneumatic controllers subject to the deadlines set forth in tables 1 and 2 of Paragraph (3) of Subsection B of 20.2.50.122 NMAC shall monitor the compliance status of each subject pneumatic controller at each facility.

(3) The owner or operator of a natural gas-driven pneumatic controller shall, on a monthly basis, conduct an AVO or OGI inspection, and shall also inspect the pneumatic controller, perform necessary maintenance (such as cleaning, tuning, and repairing a leaking gasket, tubing fitting and seal; tuning to operate over a broader range of proportional band; eliminating an unnecessary valve positioner), and maintain the pneumatic controller according to manufacturer specifications to ensure that the VOC emissions are minimized.

	January 20, 2022
1	(4) The owner or operator's database shall contain the following:
2	(a) natural gas-driven pneumatic controller unique identification number;
3	(b) type of controller (continuous or intermittent);
4	(c) if continuous, design continuous bleed rate in standard cubic feet per hour;
5	(d) if intermittent, bleed volume per intermittent bleed in standard cubic feet; and
6	(e) if continuous, design annual bleed rate in standard cubic feet per year.
7	(5) The owner or operator of a natural gas-driven pneumatic diaphragm pump shall, on a
8	monthly basis, conduct an AVO or OGI inspection and shall also inspect the pneumatic pump and perform
9	necessary maintenance, and maintain the pneumatic pump according to manufacturer specifications to ensure that
10	the VOC emissions are minimized.
11	(6) The owner or operator of a natural gas-driven pneumatic controller shall comply with the
12	requirements in Paragraph (3) of Subsection C or Subsection D of 20.2.50.116 NMAC. During instrument
13	inspections, operators shall use RM 21, OGI, or alternative instruments used under Subsection D of 20.2.50.116
14	NMAC to verify that intermittent controllers are not emitting when not actuating. Any intermittent controller
15 16	emitting when not actuating shall be repaired consistent with Subsection E of 20.2.50.116 NMAC. (7) Prior to any monitoring event, the owner or operator shall date and time stamp the event,
17	(7) Prior to any monitoring event, the owner or operator shall date and time stamp the event, and the monitoring data entry shall be made in accordance with the requirements of this Part.
18	(6) The owner or operator shall comply with the monitoring requirements in 20.2.50.112
19	NMAC.
20	D. Recordkeeping requirements:
21	(1) Non-emitting pneumatic controllers and diaphragm pumps are not subject to the
22	recordkeeping requirements in Subsection D of 20.2.50.122 NMAC.
23	(2) The owner or operator shall maintain a record of the total controller count for all
24	controllers at all of the owner or operator's affected facilities that commenced operation before the effective date of
25	this Part. The total controller count must include all emitting and non-emitting pneumatic controllers.
26	(3) The owner or operator shall maintain a record of the total count of natural gas-driven
27	pneumatic controllers necessary for a safety or process purpose that cannot otherwise be met without emitting VOC.
28	(4) The owner or operator of a natural gas-driven pneumatic controller subject to the
29	requirements in tables 1 and 2 of Paragraph (3) of Subsection B of 20.2.50.122 NMAC shall generate a schedule for
30	meeting the compliance deadlines for each pneumatic controller. The owner or operator shall keep a record of the
31	compliance status of each subject controller.
32	(5) The owner or operator shall maintain an electronic record for each natural gas-driven
33	pneumatic controller. The record shall include the following:
34	(a) pneumatic controller unique identification number;
35	(b) time and date stamp, including GPS of the location, of any monitoring;
36	name of the person(s) conducting the inspection;
37 38	(d) AVO or OGI inspection result;(e) AVO or OGI level discrepancy in continuous or intermittent bleed rate;
39	• • •
40	(f) record of the controller type, bleed rate, or bleed volume required in Subparagraphs (b), (c), (d), and (e) of Paragraph (4) of Subsection C on 20.2.50.122 NMAC.
41	
42	 (g) maintenance date and maintenance activity; and (h) a record of the justification and certification required in Subparagraph (c) of
43	Paragraph (4) of Subsection B of 20.2.50.122 NMAC.
44	(6) The owner or operator of a natural gas-driven pneumatic controller with a bleed rate
45	greater than six standard cubic feet per hour shall maintain a record documenting why a bleed rate greater than six
46	scf/hr is necessary, as required in Subsection B of 20.2.50.122 NMAC.
47	(7) The owner or operator shall maintain a record for a natural gas-driven pneumatic pump
48	with an emission rate greater than zero and the associated pump number at the facility. The record shall include:
49	(a) for a natural gas-driven pneumatic diaphragm pump in operation less than 90
50	days per calendar year, a record for each day of operation during the calendar year.
51	(b) a record of any control device designed to achieve at least ninety-five percent
52	emission reduction, including an evaluation or manufacturer specifications indicating the percentage reduction the
53	control device is designed to achieve.
54	(c) records of the engineering assessment and certification by a qualified
55	professional or inhouse engineer that routing pneumatic pump emissions to a control device, fuel cell, or process is
56	technically infeasible.

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                    (8)
                           The owner or operator shall comply with the recordkeeping requirements in 20.2.50.112
 2
     NMAC.
 3
             E.
                    Reporting requirements: The owner or operator shall comply with the reporting requirements in
 4
     20.2.50.112 NMAC.
 5
     [20.2.50.122 NMAC - N, XX/XX/2021]
 6
 7
                    STORAGE VESSELS
     20.2.50.123
 8
 9
     [REDACTED]
10
11
12
13
14
     20.2.50.124
15
                    WELL WORKOVERS
16
17
     [REDACTED]
18
19
20
21
22
     20.2.50.125
                    SMALL BUSINESS FACILITIES
23
24
     [REDACTED]
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27
28
29
     20.2.50.126
                    PRODUCED WATER MANAGEMENT UNITS
30
31
     [REDACTED]
32
33
34
35
36
     20.2.50.127
                    PROHIBITED ACTIVITY AND CREDIBLE EVIDENCE
37
38
     [REDACTED]
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40
41
     HISTORY OF 20.2.50 NMAC: [RESERVED]
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